APPENDIX A

Response to Public Comments

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Section I. Introduction

In December 1987, the U.S. Department of Energy (DOE) Savannah River Operations Office issued an environmental impact statement (EIS) for waste management activities for groundwater protection at the Savannah River Site (SRS) (DOE/EIS-0120). This document was prepared in compliance with the National Environmental Policy Act (NEPA) of 1969, as amended, the requirements of the Council on Environmental Quality Regulations for Implementing NEPA (40 CFR Parts 1500-1508), and the DOE Regulations for Implementing NEPA (10 CFR Part 1021). The assessment of environmental consequences of Federal actions that may affect the quality of the human environment are required under NEPA. Based on the potential for impacts described in the resultant document, DOE issued a record of decision on March 9, 1988, which selected the "Combination" waste management strategy as defined in the final EIS. This strategy included remediation/closure of the F- and H-Area Seepage Basins utilizing any of the various technologies, including subsurface barrier walls and treatment systems.

In the early 1990s, extensive groundwater remediation efforts were implemented under the Resource Conservation and Recovery Act (RCRA) at the previously mentioned F- and H-Area facilities to reduce the outcropping of tritium and other contaminants to Fourmile Branch. However, the RCRA Phase 1 pump/treat/reinjection systems were not compatible with the containment approach to limiting the transport of contaminants to the creek. In fact, the system operation appeared to be spreading and mobilizing contaminants (RCRA metals and metallic radionuclides) and had not had a significant influence on the contaminant influx into Fourmile Branch. The Phase 2a goal is a 70 percent reduction in tritium outcropping to Fourmile Branch and a reduction of other contaminants to the Groundwater Protection Standard (GWPS) within five years of the corrective action plan approval. The Phase 2b goal is to reduce contaminant concentrations to below GWPS at the seeplines by 2010. To achieve these goals, DOE decided to select an alternative technology. The technology selected included the installation of an underground barrier wall system combined with a base injection system. A presentation of the proposed combined barrier wall/base injection system was given to the Environmental Restoration Committee of the SRS Citizen's Advisory Board (CAB) on May 13, 2003. In compliance with 10 CFR Part 1022, a notice was published in the *SRS Environmental Bulletin* on November 24, 2003, stating DOE's proposal to implement the combined barrier wall/base injection system, and requesting any public comments on the scope of the wetland assessment. In addition, stakeholders could request review copies of either the wetland assessment when it was completed or the previously mentioned CAB presentation slides. A total of four responses were received, three providing comments on or questions about the proposed system, and one simply requesting a copy of the wetland assessment when it was completed. All four responses were from individual stakeholders.

The remainder of this appendix is contained in Section II, which presents the unedited text of the three comment letters received and the DOE response to each of these letters.

Section II. Public Comments and DOE-SR Responses

The following pages include the public comment letters received on the proposed wetland action and the DOE-SR letters sent in response to those comment letters. These documents are arranged with the comments first and the associated response letter immediately following.

William Lawless
<lawlessw@mac.com>

11/24/2003 9:33 PM

To nepa@srs.gov
cc perryholcomb@softhome.netperryholcomb@softhome net, lyddie.broussard@srs.govlyddie.broussard@srs.gov, Lee Poe, William Lawless

Subject proposed new wetland action along 4 mile branch

andrew grainger, i read with interest of the new proposal by doe-sr to install underground barrier walls in both the f and h area locations to replace the existing pump-treat-reinjection system to treat primarily tritium; i regarded the existing system as ineffective from its very beginning; simply put, the health effects to the exposed population of downstream water consumers is too insignificant to have justified the existing system of pump-treat-reinjection as the means to control tritium releases from f and h groundwater into 4 mile branch.

i do not consider the installation of underground barriers to be an improvement because the use of these barriers will not lead to a measurable decrease in the already insignificant dose from tritium releases currently received by downstream water consumers; it may lead to lower releases from the groundwater under the f and h areas into 4 mile creek, but the tritium releases and the tritium nuclides are both decaying, and as long as the public is not allowed to consume the waters of 4 mile creek, the cost-benefit of installing the underground barriers cannot be justified; instead, i prefer monitored natural attenuation.

thanks, bill lawless

Comment L1. Page 1 of 1.

Department of Energy
Savannah River Operations Office
P.O. Box A
Aiken, South Carolina 29802

MAR 1 0 2004

Mr. Bill Lawless
Paine College Math Department
1235 15th Street
Augusta, GA 30901

Dear Mr. Lawless:

SUBJECT: Response to Comments on the Proposed Wetland Action along Fourmile Branch

Thank you for your correspondence of November 24, 2003, with comments on the proposed wetland action along Fourmile Branch. I appreciate your interest and time in providing these comments to the Department of Energy (DOE) Savannah River Operations Office (SR).

The South Carolina Department of Health and Environmental Control (SCDHEC) considers reductions in the outcropping of tritium and other contaminants to Fourmile Branch and the Savannah River to be important. SCDHEC regulates the releases to the groundwater and seeplines through a Resource Conservation and Recovery Act (RCRA) permit, and the Savannah River Site (SRS) believes that it is important to comply with this permit.

The barrier systems for the closed F- and H-Area Seepage Basins will provide control for groundwater contaminated with tritium, metallic isotopes, and hazardous constituents. The existing system controls only tritium. The metallic isotopes, in solution in the groundwater due to low pH conditions, discharge to the seepline of Fourmile Branch. The remediation plan includes the introduction of basic chemicals into the groundwater associated with the closed F-Area Seepage Basins to neutralize the acid and precipitate the metallic isotopes and hazardous constituents prior to discharge to Fourmile Branch.

Again, I want to thank you for your interest and comments on SRS activities. Enclosed is a copy of the wetland assessment for the F- and H-Area Groundwater Remediation Project. If you wish to receive further information concerning either this project or about DOE-SR's National Environmental Policy Act process, please contact me at P. O. Box A, Aiken, SC 29802, telephone (803) 952-8001 or e-mail: drew.grainger@srs.gov.

Sincerely,

Andrew R. Grainger
NEPA Compliance Officer

GC-04-029

Enclosure:
F- and H-Area Groundwater
Remediation Project Wetland Assessment

Comment L1 Response. Page 1 of 1.

"Lee Poe" <leepoe@mindspring.com>

To: "William Lawless" <lawlessw@mail.paine.edu>, <nepa@srs.gov>
cc:
Subject: RE: proposed new wetland action along 4 mile branch

11/26/2003 03:52 AM

I agree with Bill completely. I had to delete Perry & Lyddie because my server said their addresses were corrupted. Lee

> -----Original Message-----
> From: William Lawless [mailto:lawlessw@mail.paine.edu]
> Sent: Monday, November 24, 2003 9:33 PM
> To: nepa@srs.gov
> Cc: perryholcomb@softhome.netperryholcomb@softhome.net;
> lyddie.broussard@srs.govlyddie.broussard@srs.gov; Lee Poe; William
> Lawless
> Subject: proposed new wetland action along 4 mile branch
>
>
> andrew grainger, i read with interest of the new proposal by doe-sr to
> install underground barrier walls in both the f and h area locations to
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> tritium; i regarded the existing system as ineffective from its very
> beginning; simply put, the health effects to the exposed population of
> downstream water consumers is too insignificant to have justified the
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> mile creek, but the tritium releases and the tritium nuclides are both
> decaying, and as long as the public is not allowed to consume the
> waters of 4 mile creek, the cost-benefit of installing the underground
> barriers cannot be justified; instead, i prefer monitored natural
> attenuation.
>
> thanks, bill lawless

Comment L2. Page 1 of 1.

Department of Energy
Savannah River Operations Office
P.O. Box A
Aiken, South Carolina 29802

MAR 1 0 2004

Mr. Lee Poe
807 East Rollingwood Rd.
Aiken, SC 29801

Dear Mr. Poe:

SUBJECT: Response to Comments on the Proposed Wetland Action along Fourmile Branch

Thank you for your correspondence of November 26, 2003, with comments on the proposed wetland action along Fourmile Branch. I appreciate your interest and time in providing these comments to the Department of Energy (DOE) Savannah River Operations Office (SR).

The South Carolina Department of Health and Environmental Control (SCDHEC) considers reductions in the outcropping of tritium and other contaminants to Fourmile Branch and the Savannah River to be important. SCDHEC regulates the releases to the groundwater and seeplines through a Resource Conservation and Recovery Act (RCRA) permit, and the Savannah River Site (SRS) believes that it is important to comply with this permit.

The barrier systems for the closed F- and H-Area Seepage Basins will provide control for groundwater contaminated with tritium, metallic isotopes, and hazardous constituents. The existing system controls only tritium. The metallic isotopes, in solution in the groundwater due to low pH conditions, discharge to the seepline of Fourmile Branch. The remediation plan includes the introduction of basic chemicals into the groundwater associated with the closed F-Area Seepage Basins to neutralize the acid and precipitate the metallic isotopes and hazardous constituents prior to discharge to Fourmile Branch.

Again, I want to thank you for your interest and comments on SRS activities. Enclosed is a copy of the wetland assessment for the F- and H-Area Groundwater Remediation Project. If you wish to receive further information concerning either this project or about DOE-SR's National Environmental Policy Act process, please contact me at P. O. Box A, Aiken, SC 29802, telephone (803) 952-8001 or e-mail: drew.grainger@srs.gov.

Sincerely,

Andrew R. Grainger
NEPA Compliance Officer

GC-04-030

Enclosure:
F- and H-Area Groundwater Remediation
Project Wetland Assessment

Comment L2 Response. Page 1 of 1.

Harper Shull

To: nepa@srs.gov
cc: Rstephen Lee/WSRC/Srs@Srs
Subject: Proposed Underground Barrier System for Four-Mile Branch.

11/25/2003 10:30 AM

Dear Mr. Grainger,

I am curious as to why the new barrier system is necessary. Are present tritium limits being violated? Would the proposed construction cause as much or more harm to the wetlands than the present system?

I am sure this proposal would create jobs for some, but it this era of tight budgets, is it completely necessary to spend more taxpayer dollars unless it is completely necessary.

Harper Shull
704-3F
2-3577

Comment L3. Page 1 of 1.

Department of Energy
Savannah River Operations Office
P.O. Box A
Aiken, South Carolina 29802

MAR 1 0 2004

Mr. Asbury H. Shull
701 Cardinal Drive
Aiken, SC 29803

Dear Mr. Shull:

SUBJECT: Response to Comments on the Proposed Wetland Action along Fourmile Branch

Thank you for your correspondence of November 25, 2003, with comments on the proposed wetland action along Fourmile Branch. I appreciate your interest and time in providing these comments to the Department of Energy (DOE) Savannah River Operations Office (SR).

The tritium releases to Fourmile Branch exceed the maximum State and Federal drinking water standard of 20 pCi/ml. However, the tritium levels in the Savannah River consistently measure well below that standard, averaging approximately 0.85 pCi/ml. Because the F-Seepage Basins "funnel and gate" system (type of barrier) as proposed would manage tritium, metallic isotopes, hazardous constituents, and reduce the acidic conditions (the result of 30 years of nitric acid discharge to the basins), there should be an improvement to the wetland conditions. Past acidic releases have caused "tree kill zones" in F Area. The existing treatment system is not designed to remedy the wetland conditions. Treatment with base prior to construction of the barrier and continued management of acidic groundwater releases (through the gates of the proposed funnel and gate) after construction of the barrier at F Area, will bring about long term improvement in groundwater quality. However, the project could affect the slope wetlands along Fourmile Branch. Because of this potential, DOE will monitor these wetlands to evaluate changes in size or location due to implementation of the proposed remediation. Pursuant to DOE's no-net-loss policy for wetlands, any adverse wetland modification will be compensated through the SRS Wetland Mitigation Bank or other wetland mitigation process. The H-Area Seepage Basins barrier system does not employ base injection at this time, but is expected to reduce the metal and tritium releases to Fourmile Branch. The H-Area barrier should improve conditions by reducing acidic groundwater outcropping to the seeplines in the wetlands.

The previous (pump, treat and re-inject) systems were very costly to operate. The new, mostly passive systems will be much more cost effective to operate. Therefore, the new systems are anticipated to result in a cost savings to the taxpayer.

Again, I want to thank you for your interest and comments on SRS activities. Enclosed is a copy of the wetland assessment for the F- and H-Area Groundwater Remediation

Project. If you wish to receive further information concerning either this project or about DOE-SR's National Environmental Policy Act process, please contact me at P. O. Box A, Aiken, SC 29802, telephone (803) 952-8001 or e-mail: drew.grainger@srs.gov.

Sincerely,

Andrew R. Grainger
NEPA Compliance Officer

GC-04-028

Enclosure:
F- and H-Area Groundwater Remediation
Project Wetland Assessment

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